

REMARKS

Status of Application

Claims 1, 3 - 12, 14, 16 - 25, 27 - 32, and 34 - 37 are now pending in the present application. Applicants have amended Claims 1, 3, 4, 6-8, 10, 11, 14, 16-26, 29, 31, 32, and 35-37 to make it more apparent that these Claims are clearly distinguished over the art cited. Claim 25 has also been amended to address the Examiner's objection. Claims 2, 13, 15, 27, and 33 have been cancelled.

Claims Rejected under 35 U.S.C. § 102

The Examiner has rejected Claims 1-37 as unpatentable over Publication U.S. Application No. 2002/0069218 to Sull et al. (hereinafter referred to as "Sull"). Applicants have amended independent Claims 1, 14, 25, 31, 36, and 37. More specifically, Claim 1 has been amended to include the recitation of Claim 2. Claims 3, 4, 6-8, 10, and 11, which originally depended from Claim 2, have been amended to depend from Claim 1, both in literal dependency and content. Similarly, Claim 14 has been amended to include the recitation of Claim 15. Claims 16-24, which originally depended from Claim 15, have been amended to depend from Claim 14, both in literal dependency and content. Also, Claim 25 has been amended to include the recitation of Claim 27. Claim 29, which originally depended from Claim 27, has been amended to depend from Claim 25, both in literal dependency and content. Claim 31 has been amended to include the recitation of Claim 33. Claim 35, which originally depended from Claim 33, has been amended to depend from Claim 31, both in literal dependency and content.

In the interest of reducing the complexity of the issues for the Examiner to consider in this response, the following discussion focuses on amended independent Claims 1, 14, 25, 31, 36, and 37. The patentability of each remaining dependent claim is not necessarily separately addressed in detail. However, applicants' decision not to discuss the differences between the cited art and each dependent claim should not be considered as an admission that applicants concur with the Examiner's conclusion that these dependent claims are not patentable over the disclosure in the cited reference. Similarly, applicants' decision not to discuss differences between the prior art and every claim element, or every comment made by the Examiner, should not be considered as an admission that applicants concur with the Examiner's interpretation and assertions regarding those claims. Indeed, applicants believe that all of the dependent claims patentably distinguish over the references cited.

Moreover, a specific traverse of the rejection of each dependent claim is not required, since dependent claims are patentable for at least the same reasons as the independent claims from which the dependent claims ultimately depend.

With regard to Claims 1, 14, 25, 31, 36, and 37, applicants have amended the claims to clarify that the invention defined therein allows for lossless editing of an image. In particular, for example, Claim 1 recites that data defining the image is accessed to produce a representation of an image, enabling a user to selectively edit the representation of the image by applying a modification to the representation, and wherein the modification comprises the step of "*selectively cropping the representation*", rendering the representation, and *storing metadata that define the modification applied to the representation in association with the image*, without modifying the data that define the image, said *metadata defining a selected size and a selected position of a crop outline on the representation of the image that is provided to indicate limits of a cropped image*" (emphasis added).

By contrast, Sull describes a method and system that is generally directed among other things, to the editing, splicing, and sequencing of "multimedia files, such as movies, and audio files, such as music" (Abstract of Sull). Sull discloses using metadata associated with a multimedia file to facilitate editing and playing of video files:

The present invention relates generally to *marking* multimedia files. More specifically, the present invention relates to *applying or inserting tags into multimedia files for indexing and searching*, as well as for editing portions of multimedia files, all to facilitate the storing, searching, and retrieving of the multimedia information.

(Paragraph 0002, "Field of the Invention;" emphasis added).

More specifically, Sull describes a system having five parts:

1. A "Multimedia Bookmark," which provides a "system and method for accessing multimedia content stored in a multimedia file having a beginning and an intermediate point, the content having at least one segment at the intermediate point" (Paragraph 0052);
2. A "Search" capability, which "uses only direct links between images without relying on image descriptors such as low-level image features or textual annotations . . . effective for the retrieval of subjectively similar images when they are gathered from a large number of users over a considerable period of time" (Paragraph 0066);

1 3. An "Editing" capability, which "can be applied not only to videos stored on CD-ROM,
2 DVD, and hard disk, but also to streaming video over a network" for "playing a newly edited video
3 only with its metadata" (Paragraph 0070). The metadata includes metadata files each of which
4 virtually splices together disparate video segments such "that when the edited metadata file is
5 accessed, the user is able to play the segments to be edited in the edited order" (Paragraph 0071);

6 4. A "Transcoding" capability, for "generating transcoded (scaled and cropped) image to
7 fit the size of the respective client display when an image is transmitted to a variety of client devices
8 with different display sizes" (Paragraph 0081); and

9 5. A "Visual Rhythm" capability, which "provides a method such that only few of the
10 pixels are decoded to obtain the actual group of pixels needed for constructing visual rhythm" instead
11 of using intraframe and interframe coding (Paragraph 0083).

12 Applicant appreciates that Sull describes a way in which metadata can be used to virtually edit
13 a multimedia file without having to actually create and store an additional multimedia file.
14 Respectfully, however, the method and system described by Sull is distinct from that claimed by the
15 applicants and, thus, does not anticipate the present invention as claimed.

16 As detailed at length in the cited reference, Sull discloses a method and system enabling the
17 editing of motion video and/or audio files and describes how segments of videos are identified within
18 a preexisting video, and identifiers associated with each of the segments are collected in metadata
19 files, or "metafiles" (Paragraph 0070; *see also* FIGURES 32-35; Paragraphs 0463-0473). The
20 identifiers may include uniform resource locators (URLs) or uniform resource identifiers (URIs)
21 where each of the segments are stored (Paragraph 0480). When an editor has established a playlist
22 including a plurality of segments, the playlist of URLs is stored in a metafile that can be accessed by
23 a video player to present the "virtually edited" video (Paragraph 0484).

24 Sull also describes the transcoding capability of the system and method, which provides for
25 scaling of video images to different classes of devices from which it is desired to view the video,
26 including devices ranging from computers to televisions to telephones and other devices (FIGURE
27 53; Paragraphs 0489-0542). The transcoding capability considers the display screen size and other
28 factors in determining the "perceptibility" for a user of a particular device (Paragraph 0523). The
29 transcoding capability of the system of Sull considers preferences of the user and publisher and the
30 capabilities of the client to invoke and apply an appropriate transcoder allowing the video to be

1 viewed on the client device (Paragraphs 0521-0523). More specifically, the transcoder analyzes the
2 scene, determines an appropriate window size as may be appropriate to the client device, and
3 transcodes the video to fit the determined window (Paragraph 0525-0526). To accomplish this
4 function, as noted by the Examiner, the system transcoder may dynamically scale and crop videos to
5 preserve the perceptibility of the video for users, allowing for some manual positioning of the
6 transcoded area by the publisher and author of the video (Paragraph 0523).

7 It is important to note at least three distinctions between Sull in contrast to the claimed
8 invention. First, the system of Sull neither teaches nor suggests that the metadata representing the
9 virtual editing and splicing of the video performed by a user are stored in association with the original
10 multimedia file. In fact, by collecting URLs or URIs of segments included in the edited multimedia
11 file, Sull teaches that the segments will likely be stored in a multitude of locations *separate* from the
12 metafile that collects the URLs or URIs that manifest the editing by the user. (Paragraph 0473). In
13 fact, as indicated in FIGURE 52 of Sull, metadata are stored on a server separate from a network
14 from which segment data are retrieved.

15 Second, the system of Sull *separately* implements editing and scaling/cropping functions. As
16 previously described, under Sull, editing may be performed by collecting segment URLs or URIs to
17 be played and storing them in a metafile. By contrast, the transcoding capability of Sull, which
18 performs the only scaling or cropping involved in Sull, is not a part of the metadata involved in the
19 editing and splicing of the segments, and is *not* part of the metadata assembled to present the edited
20 content. In fact, in Paragraphs 0489-0542 of Sull, in which the transcoding capability is described,
21 there is not a single mention of metadata or metafiles. The transcoding of Sull is implemented in an
22 algorithm maintained in a transcoder that is separate from content databases (FIGURE 45;
23 Paragraphs 0521-0523).

24 Third, the system of Sull contemplates the editing and transcoding of durational media, such
25 as video and audio clips. The editing of the media is thus directed to splicing sequences of clips, or
26 focusing on various other aspects of sequences. Sull, thus, does not teach the treatment of individual
27 images. The claims have thus been amended to recite how the claimed invention is concerned with
28 images and with metadata regarding modifications to images.

29 In sum, Sull neither describes a system in which metadata describing modifications applied to
30 an image are stored in association with the data describing the image, nor describes a system in which

1 information describing a selected size and a selected position of a crop outline on the representation
2 of the image to indicate limits of a cropped image are stored within the metadata. Thus, because Sull
3 does not recite all the elements included in the invention of Claim 1, applicants submit that Claim 1 is
4 patentable over Sull. Accordingly, Claims 3-12, which depend from Claim 1, also are patentable
5 over Sull.

6 Claim 14, as amended, recites a system in which a modification applied to a representation of
7 an image enables the user to crop the representation of the image, and metadata defining the
8 modification, including a size and position of a crop outline, are stored as metadata in association
9 with the data that define the image. As noted above, Sull neither teaches nor suggests storing the
10 metadata in association with the image. In fact, to the contrary, Sull teaches that the metadata include
11 URLs and URIs that may refer to media data stored anywhere in an accessible network.
12 Furthermore, Sull does not disclose storing the modifications to the representation used to crop the
13 image in the metadata stored in association with the image data. Thus, because Sull does not recite
14 all the elements included in the invention of Claim 14, applicants submit that Claim 1 is patentable
15 over Sull. Accordingly, Claims 16-24, which depend from Claim 14, also are patentable over Sull.

16 Claim 25, as amended, recites a method in which modifications may be made to
17 representations of an image media object, including cropping, rotating, and trimming the image, and
18 metadata defining the first modification applied to the representation of the image media object is
19 stored in association with the data defining the image, without modifying the data that define the
20 image media object. Sull neither teaches nor suggests storing the metadata in association with the
21 image. Thus, because Sull does not recite all the elements included in the invention of Claim 25,
22 applicants submit that Claim 25 is patentable over Sull. Accordingly, Claims 27, 28, 29, and 30,
23 which depend from Claim 25, also are patentable over Sull.

24 Claim 31, as amended, recites a system in which modifications may be made to
25 representations of an image media object, including cropping, rotating, and trimming the image, and
26 metadata defining the first modification applied to the representation of the image media object are
27 stored in association with the data defining the image, without modifying the data that define the
28 image media object. Sull neither teaches nor suggests storing the metadata in association with the
29 image. Sull also fails to teach storing modification data in association with the image. Thus, because
30 Sull does not recite all the elements included in the invention as recited Claim 31, applicants submit

1 that Claim 31 is patentable over Sull. Accordingly, Claims 32, 34, and 35, which depend from Claim
2 31, are also patentable over Sull.

3 Claim 36, as amended, recites a machine-readable medium storing, in association with data
4 defining an image, metadata defining a modification that is to be applied when rendering data
5 defining the image, wherein the modification comprises one of selectively cropping, rotating, and
6 trimming the image. The machine-readable medium also stores the data defining the image. Sull
7 neither teaches nor suggests storing the metadata in association with the image. Sull also fails to
8 teach storing modification data in association with the image. Thus, because Sull does not recite all
9 the elements included in the invention of Claim 36, applicants submit that Claim 36 is patentable over
10 Sull.

11 Claim 37, as amended, recites a machine-readable medium having a data structure for a
12 collection of images and comprising a substorage, wherein the substorage comprises data defining an
13 image and metadata defining a modification that is to be applied to a representation of the image
14 wherein the modification comprises one of selectively cropping, rotating, and trimming an image.
15 Sull neither teaches nor suggests storing the metadata in association with the image. Sull also fails to
16 teach storing modification data in association with the image. Sull also fails to teach storing
17 modification data in association with the image. Thus, because Sull does not recite all the elements
18 included in the invention as recited by Claim 37, applicants submit that Claim 37 is patentable over
19 Sull

20 In view of the amendments and Remarks set forth above, it will be apparent that all pending
21 claims in this application define a novel and non-obvious invention, and that the application is in
22 condition for allowance and should be passed to issue without further delay. Should any further
23 questions remain, the Examiner is invited to telephone applicants' attorney at the number listed
24 below.

25 Respectfully submitted,

26 

27 Frank J. Bozzo
28 Registration No. 36,756
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30 FJB/RMA:lrg

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2 MAILING CERTIFICATE

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4 envelope as first class mail with postage thereon fully prepaid addressed to: Commissioner for Patents,
5 Alexandria, VA 22313-1450, on February 18, 2005.

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